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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/353,938	07/15/1999	CHRISTOPHER M. JAGGERS	M-7682-US	4344

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EXAMINER

THAI, XUAN MARIAN

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 09/16/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

14

Office Action Summary

Application No.

09/353,938

Applicant(s)

JAGGERS ET AL.

Examiner

XUAN M. THAI

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23,25-39,41-48 and 50-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23,25-39,41-48 and 50-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to request for continued examination filed on August 8, 2003. Claims 1-23, 25-39, 41-48 and 50-53 are pending and presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 39 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Friend et al. (USPN 6,497,368; hereinafter Friend).

As per claim 39, Friend discloses the claimed invention including a system comprising: a modular bay (bay 160; fig. 3) having a removable-card connector (e.g. card receptacle 130; fig. 2; col. 8, lines 7-27; see also col. 9, lines 14-27), the modular bay operable to provide a housing for a removable card (see fig. 3, also see col. 8, lines 7-27; and col. 9, lines 14-27); and the removable card electrically coupled to the removable-card connector such that the removable card defines a functionality of the system (e.g. defines a function such as FLASH memory or modem functions or radio frequency transceivers including RF WAN and RF LAN; see col. 2, lines 7-27; and col. 9, lines 14-27).

As per claim 48; the claim is similar in scope to claim 39 except for being drafted in a method format; therefore, the claim is being rejected under the same rationale as claim 39 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 41-44 and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friend et al. (USPN 6,497,368; hereinafter Friend) in view of the Mini Peripheral Component Interconnect Specification (Mini PCI Spec).

As per claims 41-44, Friend discloses the bay 160 comprises the connector 130 for connecting the removable circuit card to the system bus (see col. 8, lines 7-27; and col. 9, lines 14-27). Friend further disclose that the connector and the removable card(s) are of PCMCIA types card or PC card based (see col. 9, lines 14-27). Friend do not disclose a mini-PCI connector(s) or card(s). However, the Mini PCI Spec at the time the invention was made teaches that it is known to make use of mini-PCI connectors and cards for smaller systems such as in the one disclose by Friend (see Mini PCI Spec, pages 5-6 to 5-25 for types I-III form factors connectors and cards). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modified the Friend system to incorporate the teachings of the mini-pci spec connectors and cards as taught by the Mini PCI Spec. The modified system would increase the number of implementation options. It would also allow for upgradability, flexibility, reduced cost, serviceability, reliability, reduced size which permits a higher level of integration

Art Unit: 2181

of data communications devices into a small restricted mechanical environments (see pages 1-3 and 1-4).

As per claims 50-53, the claims are similar in scope to claims 41-44 except they are drafted in a method format. Therefore, they are rejected under the same rationales applied to claims 41-44 above.

6. Claims 1-4, 6-18, 20-23, 25-30, 32-38, 41-48 and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mini PCI Specification in view of Fukuzumi (USPN 5,737,582).

As per claims 1, 2, 6-8 and 10-12; Mini PCI Specification discloses a system comprising: a mini-PCI connector (e.g. systems connector; see pages 5-6 to 5-12). However, the Mini PCI Specification does not disclose a modular bay enclosure operable to provide an interconnect for mini-pci card, which defines a functionality of the modular bay enclosure, to a computer system; and mini-pci connector electrically mounted to the modular bay enclosure, the mini-pci connector allow a user to removable attach the mini-pci card to interconnect with the computer system.

Fukuzumi in the IC Card and IC Card System art teaches that it is known to enable a variety of functions to be added to a modular IC card (modular bay enclosure) by providing a connector (27) in the modular IC card (modular bay enclosure) to enable a plurality of function cards (sub-cards 22; e.g. mini-pci cards) to be added to the main body of an IC card 21 (modular bay enclosure), the function cards (subcards) defines a functionality of the modular bay enclosure (IC card) with ease (e.g. see Abstract, figs. 1, 2, 4, 5, 6, 7, 8 and respective detailed description) and in turn provides interconnect with the computer system. It would have been

Art Unit: 2181

obvious to one of ordinary skill in the IC Card and IC Card system art at the time the invention was made to incorporate the teachings as taught by Fukuzumi in the system of Mini PCI Specification to achieve a modular system that allows for addition of and change of a plethora of function cards to be easily performed thus enable additional expansion of the memory or extension of the function after delivery to be added or changed with ease whereas it was impossible before. Furthermore, Fukuzumi states that IC card enclosure (modular bay enclosure) provides mechanical strength to protect internal circuit patterns of subcard (mini-pci card) from mechanical damage [see col. 7, lines 65 et seq. col. 8, lines 1-3]. Another advantage of incorporating the teachings of Fukuzumi is the reduction of cost (see cols. 1-2). Additionally, by using teachings of Fukuzumi, such as using IC card as modular bay enclosure and removable sub-card having connector for being connected to the main body of IC card (bay enclosure) and additional function disposed therein. The user is able to use sub-cards to meet purposes so that a variety of additional functions are easily added and therefore the convenience of the IC card (modular bay enclosure) is improved [see col. 16, lines 15-23].

As per claim 3, further comprises pin-type connector is taught by Mini PCI Spec and Fukuzumi.

As per claim 4, further comprises board-edge connector (e.g. single edge contacts; see fig. 4; element 27).

As per claim 9, the connectors are selected from a group comprising of video connector, audio connector, Ethernet connector and modem connector is within the teachings of Mini PCI Spec and Fukuzumi.

As per claims 13, 16, 20-22, and 24-26; The Mini PCI Spec and Fukuzumi discloses the claimed invention as detailed supra in reference to claim 1. The Mini PCI Spec and Fukuzumi further discloses an operating system, a CPU, system memory and I/O bus.

As per claims 14 and 15, The Mini PCI Spec and Fukuzumi further disclose various graphics capabilities and hardware for displaying graphics and network interface and card (e.g see Fukuzumi; col. 1).

As per claim 17, further comprises pin-type connector is taught by Mini PCI Spec and Fukuzumi.

As per claim 18, further comprises board-edge connector is taught by Mini PCI Spec and Fukuzumi. (see fig. 4).

As per claim 20, a modular bay enclosure containing the module connector operably connected with said mini PCI connector is taught by Fukuzumi and Mini-PCI Spec.

Art Unit: 2181

As per claims 21 and 22, the mini-PCI connector is at least one of the connectors defined by a mini-PCI specification is within the disclosure of Mini-PCI Spec. ,

As per claim 23, the connectors are selected from a group comprising of video connector, audio connector, Ethernet connector and modem connector is within the teachings of Mini PCI Spec and Fukuzumi.

As per claims 27-30 and 32-38, they encompass the same scope of invention as to that of claims 1-4 and 6-12, except that they are drafted as method format rather than apparatus format, the claims 27-30 and 32-38 are therefore rejected for the same rationale as being set forth with respect to claims 1-4 and 6-12 supra.

As per claims 39, 41-48, and 50-53, they encompass the same scope of invention as to that of claims 1-4 and 6-26, except that they are drafted as method and system format rather than apparatus format, the claims 39, 41-48, and 50-53 are therefore rejected for the same rationale as being set forth with respect to claims 1-4 and 6-26 supra.

7. Claims 5, 19 and 31 rejected under 35 U.S.C. 103(a) as being unpatentable over Mini PCI Specification in view of Fukuzumi (USPN 5,737,582), and in further view of Gilbert (USPN 6,067,583).

The combination of Mini PCI Specification and Fukuzumi discloses the claimed invention except for the use of a wireless connection medium.

Gilbert in his teachings of wireless adapter for a data-processing system having a computer including a computer interface connector for accepting a modem interface connector of a wired modem uses an adapter card to allow wireless communication. It would have been obvious to one of ordinary skill in the art to modify the system of the combination of Mini PCI Specification and Fukuzumi to allow for wireless option as taught by Gilbert. Such modification would provide alternative connector styles for interfacing to the different computers, modems, and systems; and other alternatives. This configuration would thus allow the same for example LAN adapter card to function in either a wired or a wireless configuration, and would allow upgrading the LAN card without replacing an entire wireless system. Thus being advantageous.

Response to Arguments

8. In response to applicant's arguments that claimed combination does not teach a mini-PCI card, which defines the functionality of the modular bay enclosure, to a computer system. Such arguments is deemed not persuasive because as disclosed by Fukuzumi and admitted to by applicants on page 13, that Fukuzumi's key cards as equivalent to mini-PCI card adds to the functionality of the main body of an IC card as being equivalent to a bay enclosure. Therefore, by adding functionality would means defining a functionality of the bay enclosure; thus meeting the claimed limitation as claimed by the applicants. In conclusion, the combination of the Mini-PCI Specification and Fukuzumi discloses all the features of the claimed invention as detailed supra. It is noted that Gilbert is used to show that wireless communication using a wireless

Art Unit: 2181

adapter is well known. Therefore, the combination of references together teaches all the features of the claimed invention.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Form PTO-892.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XUAN M. THAI whose telephone number is 703-308-2064. The examiner can normally be reached on Monday to Friday from 8:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



XUAN M. THAI
Primary Examiner
Art Unit 2181

XMT
September 8, 2003